

REMARKS

Claims 1, 9, and 11 have been amended to better describe the invention.

Four independent claims are pending (claims 1, 7, 9, and 11).

Claims 1 and 7 are rejected under 35 USC 103(a) as being unpatentable over Tzannes (US 6072779) combined with Hansen. Claim 9 is rejected under 35 USC 103(a) as being unpatentable over Chow. Claim 11 is rejected under 35 USC 103(a) as being unpatentable over Chow combined with Tzannes (US 2002/0009155). The examiner is urged to reconsider and withdraw the rejection.

Each of the independent claims calls for selecting a first set of sub-carriers based on signal-to-noise ratio (e.g., sub-carriers exceeding a signal-to-noise threshold), and then increasing the number of selected sub-carriers (e.g., by processing with a predetermined ratio) to leverage the corrective capacity of forward error correction. Thus, one set of carriers is selected based on measured signal-to-noise performance, but a larger number of carriers is selected in order to leverage the forward error correction capability of the communication system.

None of the examiner's references teaches these limitations of the independent claims. None of the references makes any suggestion of the idea of first selecting a number of sub-carriers based on signal-to-noise performance, and then increasing the number of carriers by a to leverage forward error correction capability. The examiner relies on col. 4, lines 1-8 in Tzannes for the limitations, but this language suggests nothing even remotely similar. The examiner admits that Chow fails to disclose the limitations (office action, page 3, paragraph 2), but suggests that the disclosure at col. 10, steps 7-11, teaches 'equivalent functionality'. Nothing in

these steps in Chow comes even close to suggesting the limitation. (Of course, even if equivalent functionality were disclosed -- and it is not -- that would not be sufficient to reject the claims; obviousness is not made out by a showing of equivalent functionality in a single reference, but requires a combination of references, which, together, teach the precise limitations of a claim, and which the prior art would be motivated to combine.)

Accordingly, independent claims 1, 7, 9, and 11 are in condition for allowance.

The remaining claims are all properly dependent on one or more of the independent claims, and thus allowable therewith. Each of the dependent claims adds one or more further limitations that enhance patentability, but those limitations are not presently relied upon. For that reason, and not because applicants agree with the examiner, no rebuttal is offered to the examiner's reasons for rejecting the dependent claims.

Allowance of the application is requested.

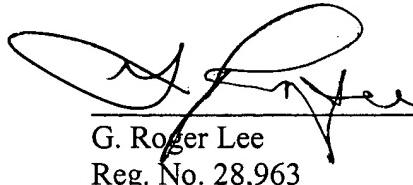
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Enclosed is a \$1020 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 5/31/05



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